

CLAIMS:

What is claimed is:

1. A method of generating a security object for use in
5 securing an item, comprising:
receiving security object data;
setting one or more attributes associated with the
security object data, wherein the one or more attributes
include a user designation of a security object type; and
10 encapsulating the security object data and the one or
more attributes with one or more methods, wherein the
security object is used to control access to secured
contents.

15 2. The method of claim 1, further comprising obtaining the
one or more methods from a security object class.

3. The method of claim 1, wherein the one or more methods
operate on the security object data and one or more
20 attributes.

4. The method of claim 1, wherein the one or more methods
operate on the security object data and input data passed to
the security object.

25 5. The method of claim 1, wherein the security object data
is one of textual data, audio data, graphical data, and
biometric data.

30 6. The method of claim 1, wherein the security object type
is one of a single use security object, a group security
object, a timed security object, a concurrent multi-user

security object, a security object throttle, a translated password security object, a security object augmented by a at least one of a CPU identifier, a CPU speed and a system configuration, a Wave file or MP3 security object, an image 5 file security object, a security object augmented by a location of the user, a security object augmented by a current window and/or pointer position, a security object augmented by an IP address, a security object augmented by a screen background characteristic, a security object 10 augmented by a personal identification number one of a speed of a card swipe and a number of times of a card swipe, a security object augmented by a mobile telephone ring or mobile telephone identification number, a security object augmented by a caller identification of the user, and a 15 security object augmented by an environmental condition.

7. The method of claim 1, further comprising:
providing the security object to a security system,
wherein the security system is not made aware of the
20 security object type.

8. The method of claim 7, wherein the security system
invokes the security object in response to a request for
access by the user.

25
9. The method of claim 1, storing the security object data
on an electronic medium in a device with data transmission
capability.

30 10. The method of claim 9, wherein the device is a
portable device.

Docket No. AUS920010559US1

11. The method of claim 9, wherein the portable device is one of a keychain, a portable MP3 player, a mobile telephone, a pager, an electronic wrist watch, a remote control, a garage door transmitter, a keyless entry device 5 for a vehicle, a smartcard, and a magnetic stripe card.

12. The method of claim 7, wherein the security object contains a partial set of methods and wherein the security system contains a complementary set of methods.

10

13. The method of claim 1, wherein the security object requires hardware assistance for authentication of input data passed to the security object.

15 14. The method of claim 1, wherein the security object data is received from a client apparatus.

15. The method of claim 1, wherein the security object data is received from a user via a user interface.

20

16. The method of claim 15, wherein the user interface is a security object foundry application resident on a computing device.

25 17. The method of claim 15, wherein the user interface is an interface transmitted from a server apparatus to a client apparatus.

18. A computer program product in a computer readable 30 medium for generating a security object for use in securing an item, comprising:

first instructions for receiving security object data;

second instructions for setting one or more attributes associated with the security object data, wherein the one or more attributes include a user designation of a security object type; and

5 third instructions for encapsulating the security object data and the one or more attributes with one or more methods, wherein the security object is used to control access to secured contents.

10 19. The computer program product of claim 18, fourth instructions for obtaining the one or more methods from a security object class.

20. The computer program product of claim 18, wherein the
15 one or more methods operate on the security object data and one or more attributes.

21. The computer program product of claim 18, wherein the one or more methods operate on the security object data and
20 input data passed to the security object.

22. The computer program product of claim 18, wherein the security object data is one of textual data, audio data, graphical data, and biometric data.

25

23. The computer program product of claim 18, wherein the security object type is one of a single use security object, a group security object, a timed security object, a concurrent multi-user security object, a security object
30 throttle, a translated password security object, a security object augmented by at least one of a CPU identifier, a CPU speed and a system configuration, a Wave file or MP3

Docket No. AUS920010559US1

security object, an image file security object, a security object augmented by a location of the user, a security object augmented by a current window and/or pointer position, a security object augmented by an IP address, a
5 security object augmented by a screen background characteristic, a security object augmented by a personal identification number and one of a speed of a card swipe and a number of times of a card swipe, a security object augmented by a mobile telephone ring or mobile telephone
10 identification number, a security object augmented by a caller identification of the user, and a security object augmented by an environmental condition.

24. The computer program product of claim 18, further
15 comprising:

fourth instructions for providing the security object to a security system, wherein the security system is not made aware of the security object type.

20 25. The computer program product of claim 24, wherein the security system invokes the security object in response to a request for access by the user.

26. The computer program product of claim 18, further
25 comprising fourth instructions for storing the security object data on an electronic medium in a device with data transmission capability.

27. The computer program product of claim 18, further
30 comprising fourth instructions for storing the security object data in a portable device.

28. The computer program product of claim 27, wherein the portable device is one of a keychain, a portable MP3 player, a mobile telephone, a pager, an electronic wrist watch, a remote control, a garage door transmitter, a keyless entry 5 device for a vehicle, a smartcard, and a magnetic stripe card.

29. The computer program product of claim 24, wherein the security object contains a partial set of methods and 10 wherein the security system contains a complementary set of methods.

30. The computer program product of claim 18, wherein the security object requires hardware assistance for 15 authentication of input data passed to the security object.

31. The computer program product of claim 18, wherein the security object data is received from a client apparatus. 20 32. The computer program product of claim 18, wherein the security object data is received from a user via a user interface.

33. The computer program product of claim 32, wherein the 25 user interface is a security object foundry application resident on a computing device.

34. The computer program product of claim 32, wherein the user interface is an interface transmitted from a server 30 apparatus to a client apparatus.

35. An apparatus for generating a security object for use in securing an item, comprising:

means for receiving security object data;

means for setting one or more attributes associated

5 with the security object data, wherein the one or more attributes include a user designation of a security object type; and

means for encapsulating the security object data and the one or more attributes with one or more methods, wherein 10 the security object is used to control access to secured contents.

36. The apparatus of claim 35, means for obtaining one or more methods from a security object class.

15

37. The apparatus of claim 35, wherein the one or more methods operate on the security object data and one or more attributes.

20 38. The apparatus of claim 35, wherein the one or more methods operate on the security object data and input data passed to the security object.

39. The apparatus of claim 35, wherein the security object 25 data is one of textual data, audio data, graphical data, and biometric data.

40. The apparatus of claim 35, wherein the security object type is one of a single use security object, a group 30 security object, a timed security object, a concurrent multi-user security object, a security object throttle, a translated password security object, a security object

CONFIDENTIAL
DO NOT COPY

augmented by a at least one of a CPU identifier, a CPU speed and a system configuration, a Wave file or MP3 security object, an image file security object, a security object augmented by a location of the user, a security object

5 augmented by a current window and/or pointer position, a security object augmented by an IP address, a security object augmented by a screen background characteristic, a security object augmented by a personal identification number and one of a speed of a card swipe and a number of 10 times of a card swipe, a security object augmented by a mobile telephone ring or mobile telephone identification number, a security object augmented by a caller identification of the user, and a security object augmented by an environmental condition.

15

41. The apparatus of claim 35, further comprising:
means for providing the security object to a security system, wherein the security system is not made aware of the security object type.

20

42. The apparatus of claim 41, wherein the security system invokes the security object in response to a request for access by the user.

25 43. The apparatus of claim 18, further comprising means for storing the security object data on an electronic medium in a device with data transmission capability.

44. The apparatus of claim 43, wherein the device is a 30 portable device.

Docket No. AUS920010559US1

45. The apparatus of claim 44, wherein the portable device is one of a keychain, a portable MP3 player, a mobile telephone, a pager, an electronic wrist watch, a remote control, a garage door transmitter, a keyless entry device 5 for a vehicle, a smartcard, and a magnetic stripe card.

46. The apparatus of claim 41, wherein the security object contains a partial set of methods and wherein the security system contains a complementary set of methods.

10

47. The apparatus of claim 35, wherein the security object requires hardware assistance for authentication of input data passed to the security object.

15

48. The apparatus of claim 35, wherein the security object data is received from a client apparatus.

49. The apparatus of claim 35, wherein the security object data is received from a user via a user interface.

20

50. The apparatus of claim 49, wherein the user interface is a security object foundry application resident on a computing device.

25

51. The apparatus of claim 49, wherein the user interface is an interface transmitted from a server apparatus to a client apparatus.

52. A method of securing contents, comprising:

30 receiving a request for access to the contents, the request including input data;

Digitized by Google

Docket No. AUS920010559US1

in response to receiving the request for access,
retrieving the a user defined security object;

applying the user defined security object to the input
data; and

5 controlling access to the contents based on the
application of the user defined security object to the input
data.